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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,814	08/26/2003	Bryan V. Butler	WEAT/0314	4565

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EXAMINER	
STEPHENSON, DANIEL P	
ART UNIT	PAPER NUMBER
3672	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,814	BUTLER ET AL.	
	Examiner	Art Unit	
	Daniel P. Stephenson	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-37* is/are pending in the application.

4a) Of the above claim(s) *24-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-23 and 32-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *24-31* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 24-31 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: they methods which use different species of gas lifting jet pumps.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 24-31 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 13-15, 18-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Roeder in view of Wilkinson. Roeder (Figures 1 and 2) discloses an apparatus for pumping fluids from the production zone of a wellbore. The apparatus has a pump (24), with a fluid outlet. The fluid outlet carries at least a portion of the wellbore fluid when the pump is pumping. There is a gas supply (20, 21), which forms gaseous bubbles in said wellbore, and more specifically in the pump as it is used to lift the fluid. The pump is a jet pump with a fluid inlet communicable through said pump with the fluid outlet. There is a tube (26) extending downwardly in the wellbore from a wellhead location to the pump. The tube is in fluid communication with the

pump inlet. There is a casing between the wellbore and the tube. There is a wellhead disposed over the casing, and a fluid outlet disposed adjacent to the wellhead. Above ground there is a fluid control system. Roeder does not disclose that the fluid pumped down to the jet pump is a mixture of liquid and compressed gas. Wilkinson (col. 2 lines 60-64) discloses a jet pump, which uses a high-pressure mixture of liquid and gas as its power fluid. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the mixture of liquid and gas as shown by Wilkinson with the jet pump of Roeder. This would be done because it is beneficial to have an admixed gas/fluid mixture when performing gas lift as taught by Roeder (col. 5 lines 34-36).

With regards to claim 15, the fluid will be throttled by the design of Roeder and the gas will escape when the fluid mixture reaches the annulus, which has a larger cross-sectional area then the inside of the jet pump.

With regards to claim 22, it is Officially Noticed that in the art of jet pump power fluids it is common to utilize both recycled fluid and fluid from a new source. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use either a new source of gas or liquid for the power fluid in Roeder in view of Wilkinson. This would be done to maintain a constant mixture regardless of what is being produced from the well.

4. Claims 32-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roeder in view of Wilkinson and Cooper et al. Roeder in view of Wilkinson shows all the limitations of the claimed invention, except, it does not disclose that the pump used to pump the power fluid down the borehole is a high pressure multiphase pump that provides the liquid/gas mixture. Cooper et al. discloses a multiphase pump that takes a liquid and gas mixture and

converts it to a predominantly liquid stream. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the multiphase pump of Cooper et al. with the apparatus of Roeder in view of Wilkinson. This would be done because a multiphase pump is useful in transporting liquid/gas mixtures of fluid.

5. Claim 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Roeder in view of Wilkinson and Cooper et al. as applied to claim 32 above, and further in view of Sanderford. Roeder in view of Wilkinson and Cooper et al. shows all the limitations of the claimed invention, except, it does not disclose that there is a start-up system in the fluid control system. Sanderford discloses a gas lift system that includes a start-up system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the start-up system of Sanderford with the apparatus of Roeder in view of Wilkinson and Cooper et al. This would be done because it is common knowledge in the art of gas lifting operations that a start-up control must be used.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

DPS ppy